

WHAT IS CLAIMED IS:

Sub B1 1. An electrophotographic developing type reproduction apparatus, comprising:

data transmitting means for generating converted data by converting input data to


3 be printed into video data in accordance with a first clock signal, and for transmitting the
4 converted data in response to a horizontal synchronization signal exhibiting a predetermined time
5 interval;

6 chopping means for providing chopped data by dividing the converted data from
7 said data transmitting means in accordance with a second clock signal; and

8 printing control means for providing beam data in response to said chopped data,
9 for controlling printing of the video data by generating electrical signals to control generation of
10 a light beam by a light source element, and for generating said horizontal synchronization signal
11 in correspondence with a beam detection signal derived from the light beam by the light source
12 element.

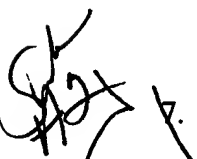
1 2. The electrophotographic developing type reproduction apparatus of claim 1, further
2 comprised of the second clock signal having a frequency greater than the first clock signal.

1 3. The electrophotographic developing type reproduction apparatus of claim 1, further
2 comprised of a frequency of the second clock signal being an integer multiple of a frequency
3 of the first clock signal.

1  4. The electrophotographic developing type reproduction apparatus of in claim 1,
2 further comprised of said chopping means comprising an AND gate having a first input port
3 coupled to receive said converted data and a second input port coupled to received said second
4 clock signal.

1 5. The electrophotographic developing type reproduction apparatus of claim 1, further
2 comprised of mode selecting means enabling a user to externally change a characteristic of said
3 second clock signal.

1 6. The electrophotographic developing type reproduction apparatus of claim 1,
2 further comprised of a semiconductor laser device serving as the source element.

1  7. The electrophotographic developing type reproduction apparatus of claim 1,
2 comprised of:
3 first means for generating a local clock signal; and
4 second means for generating said second clock signal by dividing said local clock
5 signal in dependence upon a dividing ratio component of said input data.

1 8. The electrophotographic developing type reproduction apparatus of claim 1,
2 comprised of:
3 means for generating a local clock signal;
4 first means for generating said first clock signal by dividing said local clock signal;

5 and

6 second means for generating said second clock signal by dividing said local clock
7 signal in dependence upon a dividing ratio component of said input data.

1 9. The electrophotographic developing type reproduction apparatus of claim 1,
2 comprised of said chopping means intermittently transmitting said serial video data during pulses
3 of said second clock signal.

1 10. The electrophotographic developing type reproduction apparatus of claim 1,
2 comprised of:

3 a component of said input data specifying a dividing ratio; and

4 means for setting a frequency exhibited by said second clock signal in dependence
5 upon said component.

1 11. The electrophotographic developing type reproduction apparatus of claim 1,
2 comprising:

3 a component of said input data specifying a dividing ratio;

4 means for setting a frequency exhibited by said second clock signal in dependence
5 upon said component; and

6 said chopping means dividing said converted data into a series of pulses exhibiting
7 a pulse frequency corresponding to said frequency exhibited by said second clock signal.

5K AB 12. A method for controlling a light signal in an electrophotographic developing type reproduction apparatus, said method comprising the steps of:

generating converted data by converting input data to be printed into video data, in accordance with a first clock signal, and for transmitting the converted video data in response to a horizontal synchronization signal exhibiting a predetermined time interval;

generating chopped data by dividing the converted data in dependence upon a second clock signal;

supplying beam data for controlling generation of said light signal by a light source element in response to said chopped data; and

generating said horizontal synchronization signal in dependence upon a beam detection signal obtained from said light signal.

13. The method of claim 12, comprising the second clock signal having a frequency higher than the first clock signal.

14. The method of claim 12, comprising a frequency of the second clock signal being an integer multiple of a frequency of the first clock signal.

15. The method of claim 12, comprised of generating the chopped data by applying the converted data to a first input port of an AND gate data and applying the second clock signal to a second input port of the AND gate.

1 16. The method of claim 15, comprised of changing a characteristic of the second
2 clock signal in response to a selection made by a user of the reproduction apparatus.

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3 18. An apparatus for printing video data, comprising:
4 data bus means for providing input video data and for providing dividing ratio
5 data;
6 clock signal generating means for generating a first clock signal and for generating
7 a second clock signal, said second clock signal exhibiting a characteristic depending upon said
8 dividing ratio data;
9 data transmitting means for converting said input video data into serial video data
10 in response to said first clock signal, and for transmitting said serial video data in response to
11 a horizontal synchronization signal;
12 logic means for providing chopped video data in dependance upon said serial video
13 data and said second clock signal;
14 printing control means for generating beam data in response to said chopped video
15 data; and
16 beam scanning means for providing a laser beam for defining images
17 corresponding to said beam data and for generating a beam detection signal derived from
18 scanning of said laser beam;
 said printing control means generating said horizontal synchronizing signal in
dependence upon said beam detection signal.

~~18~~ 19. The apparatus of claim ~~18~~ 17, comprised of generating said first clock signal with a frequency less than said second clock signal.

~~18~~ 20. The apparatus of claim ~~18~~ 17, comprised of generating said first clock signal with a frequency equal to said second clock signal.

~~18~~ 21. The apparatus of claim ~~18~~ 17, comprised of said clock signal generating means comprising means for changing said characteristic of said second clock signal in correspondence with changes in said dividing ratio data.

~~18~~ 22. The apparatus of claim ~~18~~ 17, comprised of said clock signal generating means comprising:
first means for generating a local clock signal; and
second means for generating said second clock signal by dividing a frequency of said local clock signal in dependence upon said dividing ratio data.

~~18~~ 23. The apparatus of claim ~~18~~ 17, comprised of said clock signal generating means comprising:
means for generating a local clock signal exhibiting a first plurality of pulses characterized by a local frequency;
first means for generating said first clock signal by dividing pulses of said local clock signal to provide a second plurality of pulses characterized by a second frequency; and

7 second means for generating said second clock signal by dividing said pulses of
8 said said local clock signal in dependence upon said dividing ratio data, to provide a third
9 plurality of pulses characterized by a third frequency established in dependence upon said
10 dividing ratio data.

